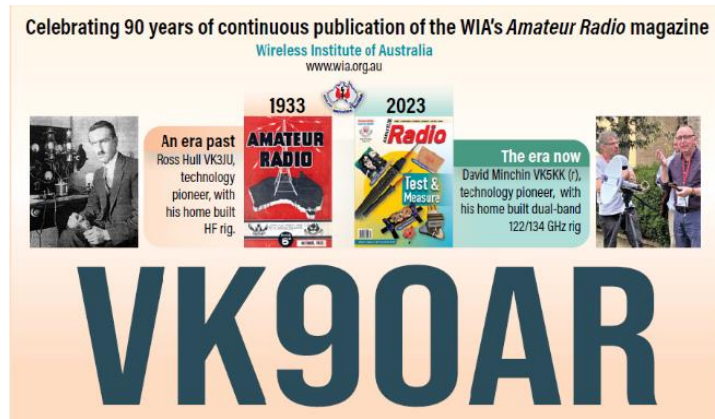




# BARG News

*Ballarat Amateur Radio Group*

*Inc. #6953T*

*August 2023 Monthly Newsletter*

## Next Meeting

**11:00am, Saturday 26<sup>th</sup> August 2023**

**At the Airport - All Welcome**



**Contacting us**

[BARG@BARG.ORG.AU](mailto:BARG@BARG.ORG.AU)

We're on the web.

[www.barg.org.au](http://www.barg.org.au)

[https://twitter.com/vk3\\_barg](https://twitter.com/vk3_barg)

<https://www.facebook.com/groups/VK3BML/>

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Times and dates of nets as below

**Club Nets: VHF NET:** Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

**HF NET:** Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

**6m NET:** Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM with a 91.5 tone - VK3RWU

**LINKED REPEATERS:** The local VK3RBA-70cm repeater on Mt Buninyong is part of a network of linked repeaters covering North-Western Victoria.

Access details for this repeater have recently changed.

For full details of this linked network and access details see <https://www.qrz.com/lookup/vk3rba>

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503.

### **BARG inc. OFFICE BEARERS**

|                 |                        |                 |                          |
|-----------------|------------------------|-----------------|--------------------------|
| President       | Ben Daniel VK3NRD      | Ordinary Member | Tom George VK3DMK        |
| Vice President  | Colin Consiglio VK3NCC | Ordinary Member | Colin Consiglio VK3NCC   |
| Secretary       | Mal White VK3OAK       | Ordinary Member | Doug Ellery VK3DRE       |
| Treasurer       | Chris Huggins VK3QY    | Ordinary Member | David Martin VK3KQT      |
| Ordinary Member | Craig Cook VK3KG       | Ordinary Member | Lachlan Macdonald VK3ALM |
| Ordinary Member | Ian Fairweather VK3YFD |                 |                          |

## **New Dates and Times of BARG General Meetings**



The meeting dates for the next 2 months still remain Saturdays at 11.00am and are as follows:

Saturday August 26<sup>th</sup> at 11 am      Saturday September 30<sup>th</sup> at 11 am

## **Construction Sessions/Days**

Are on the next two dates:

Saturday September 2<sup>nd</sup> at 1 pm      Saturday October 7<sup>th</sup> at 1 pm





# THE GEORGE FOWLER MEMORIAL AUCTION



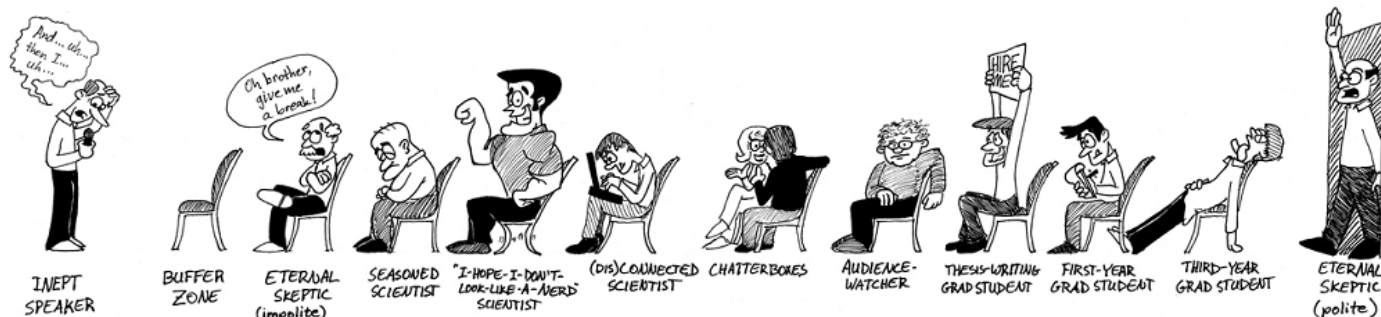
Sunday 17<sup>th</sup> September  
2023

BARG CLUB ROOMS  
BALLARAT AIRPORT

There will be a BBQ  
and viewing from 11am.

## NOTICE OF BARG inc ANNUAL GENERAL MEETING

### THE COMPLETE GUIDE TO CONFERENCE ATTENDEES



Notice is hereby given.  
of the  
**Ballarat Amateur Radio Group Annual  
General Meeting.**  
Saturday 28<sup>th</sup> of October 2023. 11:00am  
with BBQ lunch to follow.

## VK3OAK Parks & Peaks activity next week



Contributor Mal VK3OAK

Hi BARG. I've got some time off next week and I'm planning to spend at least some of that time activating some parks in Southwest of NSW. If all goes well I should be on the air at some point most mornings and afternoons. It'd be great to make some contacts with BARG members.

Parks activators preferred frequency is **7.144** on 40, working between 7.140 and 7.170 when that's busy. Those climbing the SOTA summits prefer 7.090.

On 20m **14.310** or **14.315** are popular. The target on 15m tends to be **21.310** and **28.444** on 10m.

Club member Alan, VK3HRA runs the very popular Parks and Peaks website which shares spots of current activity and alerts for planned activations. <https://parksnpeaks.org/> Check it out.

When making a contact all that's required is the exchange of a standard signal report. Unlike a contest, the reports are typically a real report rather than the contest default of 59 even when the strength is S1, and readability is also 1.

As a chaser there's no requirement to log anything. In fact, the WWFF parks programs doesn't even have an option for a chaser to submit a log.

I'm planning to try working on 40m, 20m and maybe 10m. If you're around the radio, listen out for me and give me a shout.

If you'd like to be able to track my progress more closely in real time next week, please drop me email.

73 Mal VK3OAK





# Historical Radio Society of Australia Radiofest 2023



**Southern Community Centre, 27 Rupert Drive, Mulgrave, Vic**

## *Join us for the Melbourne 2023 RadioFest*

### *Where*

The Southern Community Centre, 27 Rupert Dr, Mulgrave. (The usual meeting place for Melbourne members, however we have booked the entire facility)

More details in the Yellow Pages. Updates also on the website and email Newsletters.

### *Who to contact*

**Auction Manager.** Jim Greig. [jjgreig@bigpond.com](mailto:jjgreig@bigpond.com). 03 5441 3072

**Auction Bookings** (from July 18) **Evan Murfett** [evan.murfett@gmail.com](mailto:evan.murfett@gmail.com) or  
PO Box 356 Dingley Village, Vic 3172 • EFTPOS available at the Auction (only).

• The auction will be **Class** or desirable items. • No boxes of things. • The Auction manager reserves the right to not accept an item. • **100 lots** will be accepted.

**September 16th • Set up time 8-9 AM • Inspection 9-10 AM • Auction 10 AM - 1PM**

*As always reserve prices can be set but we have noticed radios with high reserves are often passed in where low reserves often attract excellent bidding. Also if an item does not make the reserve the owner will often sell at the lower price. Please set the reserve to what you will accept, not what you want. The auctioneer will be aiming to achieve the best price always.*

**Table Bookings** (Sales or Display) **Graham Parslow** [grparslow@gmail.com](mailto:grparslow@gmail.com)

0432 910 290 Please state if you want a display table or seller's table

Single Table bookings until we see how many spares are available.

You can state your preferred number of tables.

There is no Eftpos in the Hall, unless a seller has an Eftpos unit, so bring some cash.

**Accommodation - Peter Schwegler** is making a list, including places he has stayed at.  
[schweglerpeter@yahoo.com.au](mailto:schweglerpeter@yahoo.com.au)

**Dinner Bookings** TBA. We are having dinner at the Mulgrave Country Club in a room that easily fits 150 +. Their meals are of a high standard.

A Guest Speaker with Radio Station experience is also booked.

Door, Table and other prizes will be announced.

**Catering** - Drinks, sandwiches and Pies will be available.

**RadioFest Manager.** Kevin Poulter [image@netspace.net.au](mailto:image@netspace.net.au) 0435 378 678

## An Antenna for a Small Backyard.

Contributor Peter VK3APW.

So, an End fed Antenna that is NOT a Half Wavelength Long, surely that can't work, right??

Well, it just so happens, by combining a 9:1 Unun, and a specific length of wire, that is not resonant in any amateur band, it can be shown, to be quite useful antenna. One that will cover a good few bands. I am not saying it will beat a full size dipole at height, but if you don't have the space.....

Full disclosure, the antenna I am using was cheque book engineered, back when our dollar was strong against the green back, and paid overtime was plentiful.

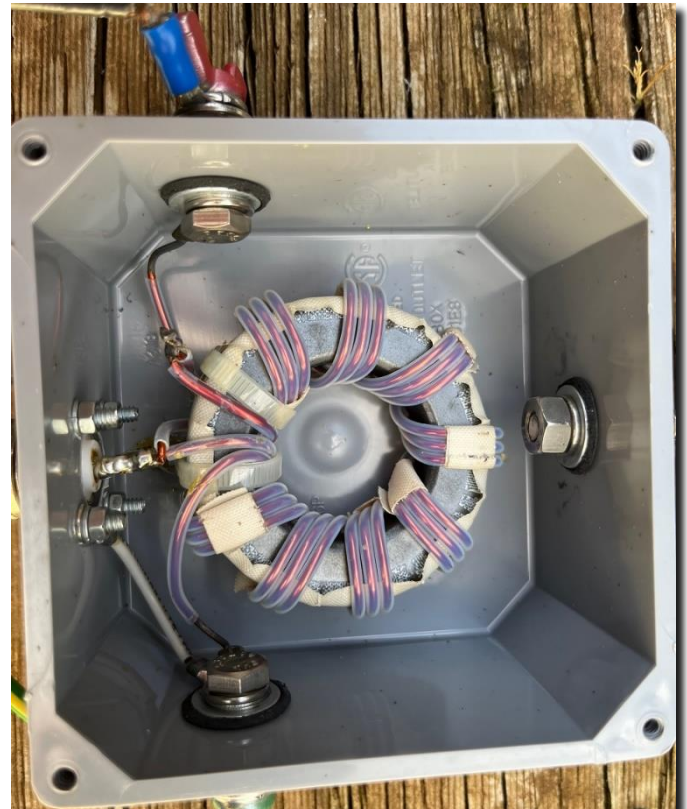
What did I get for my \$50 inc post?

A solidly built 9:1 Unun, rated at 1.5KW, and 36ft hard drawn copper wire. Fig 1.

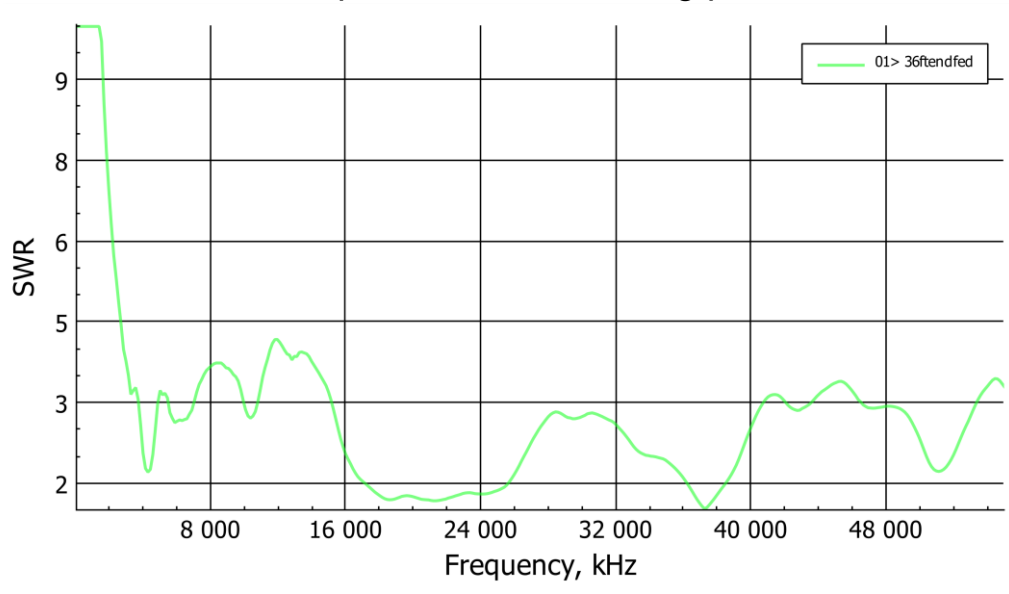
Installation instructions state you 'must' use at least 50ft of feed line.

"Danger Will Robinson." This was not really an issue, as the rig was almost far enough away to warrant it. My first thought was the feed line must be the other half of the antenna. To dismiss these thoughts, I installed the Unun, about 20ft up, with a choke in the feed line, and a counterpoise, long enough to hit the ground.

This antenna was then swept, and the resulting plot below.



1 Unun





As you can see, all of the amateur allocations, between 80 and 6M are under 3:1. While this is not great, it is well within the capabilities of ATUs built into most rigs, to give a 1:1 match, on all the bands.

While this antenna does load up on 80M, it is not all that great... I can't hear Maca on the Barg club net. However, 40M and up, it appears to work reasonably well. I have 88 countries confirmed in my logbook, using at least one of the bands, while staying within the LCD. For some reason, the WARC bands seem to work very well.

There are other lengths of wire, that probably will result in better performance, than the 36ft.

For 40M to 6M, these are 44 and 49ft.

160M to 80M try 53, 59, 72, 88.5, 124.5, 146, 162 and 175ft. ( red values indicate sweet spots )

Please note the unun used here, is different to the standard end half wave device, which is 49:1.

While this antenna has many compromises, it has enabled me to work FT8 on the HF bands, with little fuss. Your mileage may vary.

Cheers Peter, VK3APW

### **"Money" for Old Rope.**

Lach VK3ALM is on the hunt for "Telstra" rope.

Good stuff, Telstra only use a length once.

Specification:

- Break load 595kg. Fully complies to AS4142.2

Great for antenna rigging and mast guying.





## **COME ALONG TO THE BARG COFFEE MORNINGS**

Excellent turnout for this weekly club activity this month.

One new callsign and a candidate getting ready for his exam.

CONGRATULATIONS TO Mark VK3VBQ.



Pictures compliments of Tom, VK3DMK and Tina, proprietor of Food Seduction on Doveton.

Every Thursday at 10 am

Food Seduction on Doveton

524 Doveton St Nth Soldiers Hill

(The old Gove Bike Shop)

# Warts and all – A life in Broadcast and Amateur Radio

By Steve VK3ZAZ BOCP.

I need to act my age and grow up, they said, way back in the 1960s, when I preferred to go board riding with my mates to Port Elliot in Encounter Bay S.A. But surfboards cost money and work got in the way, but so did youth-full follies and I became a bit of a delinquent in my teenage years and ended up in strife and at the Magill Boys home, under the control of the children's welfare department.

That in turn led to meeting two ex-coppers who ran the radio class at the reform school, which in turn led me to learning radio principals from that class. The instructors' names were Rosevear and Wright, I forget their calls that then led to building a super-het receiver, and later on the offer of an apprenticeship at their Radio Company.



It's where I saw my first Vinten AM taxi radios and saw how Aussie know-how was better than Brit technology. Interesting job climbing the Hills Tower and taping cable from 30 metres up, hauling base stations up the back stairs and grinding off points and refurbishing 3301 Vibrators for PYE Two Way radios.



I got my AOLCP, no Morse and VK5ZSG was issued, followed by an acceptance by AWA into the Marconi School of Wireless, transferring to AWA Aviation at Essendon Airport working with Lance VK3AHL on Marconi NDB receivers, and studying to become a Broadcast Technician, which was obtained after passing the PMG theory exam, and then the practical at the RMIT Annexe in 1969.

Original BOCP V9 granted in June 1969 by the then PMG department.

Armed with my fresh BOCP, and my new Z call VK3ZAZ, AWA transferred me from their Aviation Division to their Broadcast Division North Ryde and my first of many projects at Radio 2GN Goulburn NSW. I had a propensity for unusual projects including being one of the first SSB operators on 2 meters in VK3; using an F type SSB generator I bought from Bail Electronics in 1968 and mixed to 6 and 2 meters.



AWA sent me to Goulburn, and I stuck my head literally into the AWA BTM2A 2 KW BC transmitter with serious RF feedback problems. This was created by a huge RF field generated by a large coil used to impedance match from a 200-watt SS driver stage using TRW 200-watt germanium transistors, feeding back into the low-level modulator driver boards, also solid state built on Vero boards.



The end result was always the same; the 4/1000A modulator tubes would lose bias and take off, white hot melting the plexiglass safety screen.

The solution eluded us, and we ended up converting the transmitters into BTM2bs retrofitting a pair of 6146B drivers, mounted on a 5-rack unit insert.



Moving on I visited other 2A equipped stations, 2CA ACT 2XL Cooma, 3TR Sale 3BO Bendigo and retrofitted the modifications to the BTM2As, it was only in 1976 at Hamilton I actually fixed a BTM2A of the fault without the mods. But I digress.

1970 came and went and although licensed as VK2ZIT, VK1ZAZ I was relatively inactive except on 2M FM with an AWA Carphone. I relocated to Lubeck Victoria where I met Jack VK3AKW (SK) and facilitated the studios at Firebrace Street Horsham for VBN and converted 3LK Lubek Relay into 3WM Bright in the Middle of your Dial in 1971. This was a challenge, and the program was fed via the countryside aerial lines from Horsham to Dooen to Jung to Murtoa then up the railway aerials to Lubek. Swell was a real problem as were the audio line levels but we got the air regardless using BTM5 valve transmitters and PIE equipment.



R.B. 106.

COMMONWEALTH OF AUSTRALIA.

Wireless Telegraphy Regulations. Certificate No. 79

**Broadcast Station Operator's  
Certificate of Proficiency**

This is to Certify that Stephen Richard GREGG

satisfied the Postmaster-General on the third day of June 1969  
that he possessed the knowledge and qualifications specified hereunder. He has made  
a Declaration that he will preserve the secrecy of wireless communications.

QUALIFICATIONS.

(a) A knowledge of the general principles of electricity and of radiotechnology, and of all the electrical and wireless telephony equipment used by broadcasting stations.

(b) A practical knowledge of the working and adjustment of all apparatus normally used by broadcasting stations.

(c) Ability to adjust and carry out repairs to the apparatus referred to in the last preceding paragraph.

Dated this fourth day of September 1969

Issued by Authority of the Postmaster-General.

for the Director-General, Posts and Telegraphs.

Signature of Holder \_\_\_\_\_

Date of Birth 10th September, 1946 Place of Birth Birmingham, ENGLAND

N.B.—This Certificate may be cancelled or suspended, at the discretion of the Minister, in cases of incompetence, misconduct, or breach of the Regulations on the part of the holder. In the event of this Certificate coming into the possession of any person other than the holder, it should be forwarded immediately to the Controller, Radio Branch, Postmaster-General's Department, Melbourne, Victoria.

P.T.O.

It was there I met the Western Zone after becoming re-licensed as VK3ZAZ from site of 3LK and became active on 2M using an AWA Carphone via VK3RWZ Bill on the Hill

A break to study at Ballarat CAE with Bryon YFL Lachie and Ian Fairweather, a cadetship to Telecom and then the next assignment after the studios at 3HA Hamilton burnt down owned by VBN and I was sent to save the day. Robbie VK3AUR was the incumbent tech in charge later became an SK.

3HA got rebuilt and put on air just before the disastrous bushfires on January 1977 that burnt through the western districts with great loss of fences, stock and people.



3HA done and dusted, got married and worked from 1978 until 1992 for myself, trained to fly by Bill VK3WK, then became a TAFE teacher and commenced part time work at 3YB Warrnambool transiting to FM, 3BO Bendigo transiting to FM, 3HA transiting to MIXX FM and then became senior local maintainer at Mt Dundas Melville Forest, and child sites that look like a post code list...Mt Clay, Mt Cole, Mt William, Tower Hill, Tesysbury Wayside, Warrion Hill, Mt Arapiles, Lawloit, Dooen, Mt Alex, Coleraine, Casterton and Mt Burr. Highlights turning OFF analog, Turning On DTV, and handing out to amateurs, copious power amplifiers from TV and in one case a radio station where I sidelined the 150, 400-watt power amps from 3WV 594 and passed them onto amateurs.



Facilitated lots of handouts to hams including complete broadcast transmitters to VK3TOTs father...

That's about it, should act my age at 77 but the phone keeps ringing and I see no reason to change what I do. Latest roll out suite of five x 20kw R&S FM Txers running a combined 100000 watts...

73 Steve VK3ZAZ BOCP V9.



Steve Reporting for Macquarie Broadcasting 1979 Repco Driving a 1974 Works rally Corona GT out at Silverton. 1600S Rally prepared.



RFDS HF radio equipment using a Macleod HF whip. Bryon VK3YFL and Steve Kryal Castle rally 1974 BCAE Engineering student driving a 1967 Corona.

## **IDEAS ARE WELCOMED FOR OUR CONSTRUCTION AFTERNOONS/EVENINGS**

Are there any ideas that you may have for construction sessions, let Lach VK3ALM know.

Some suggestions;

- Programming your Beofeng and/or Quansheng.
- Driving the Nano VNA and associated PC software.
- Antenna for railway mobile...
- Antenna/Aerial (depends on the University you went to.) construction, wire and loading coil. Long wire, vertical, Yagi, Mosley, J-Pole Slim Jim.
- Portable dual band Yagi for foxhunting/satellites.

**BARG inc ARE DOING IT AGAIN..**

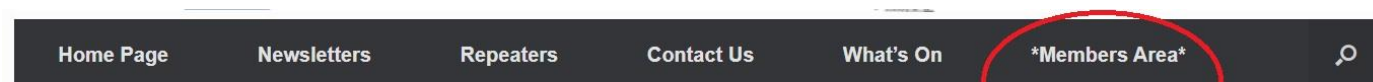


**SAUSAGE SIZZLE**

**Sunday 24<sup>th</sup> September 2023**

Contact Mal VK3OAK if you can help.....  
Self-register or contact Mal if unable"

There is a form on the BARG website for those able to assist to place their name and suitable times.



\*Members Area\*

**This is the general entry for all BARG Members. It is in a preliminary testing phase.**

*Access to the following items will require a password. Passwords will be distributed to members as part of the signup process. When the period of grace has passed after membership dues for renewal, the password will be changed and redistributed to members.*

- [General Member Area:](#) ( Password required)
- [Committee Member Area:](#) (Password Required)

**BBQ/Sausage Sizzle at the Bunning Store Sunday 24th September, 2023.**

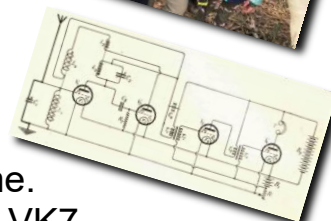
We need your assistance on the day. Let us know [HERE:](#)

**Click here..**

## Magazine Reviews

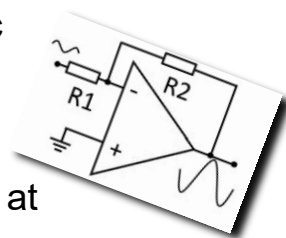
### Amateur Radio Vol 91 No4 2023 Review

- P3 Contents.
- P4 Editorial. Column for young people, VK90AR.
- P5 Board Comment. AGM, VK7 Centenary, volunteers, and young people.
- P6 WIA News. Events, SOTA, POTA and HEMA!!!!
- P10 Annual Awards. Encouragement, Higginbotham, Shawsmith, Technical.
- P12 WestNews. Installation of VK6REX atop tower at Harold Holt Naval Communications Station at Exmouth WA.
- P15 Below 25. Young people on the air, Collaroy Plateau Scouts.
- P16 Centenary of Trans-Pacific Test, Part 2. Reports in May 1923 Argus newspaper, examples of receiving sets of the day, 3BQ history, maritime operations, history of first contacts.
- P21 Retro-tech enjoys an airing in this annual event. AM and CW on ANZAC day 2023, using gear reminiscent of the time.
- P22 Brief History of WIA and local amateur group broadcasts in VK7. A timeline of experiments and notable operators through the decades. ATV, AM, linking of repeaters for WIA broadcasts.
- P28 ITU news. 23cm band under threat at the next World Radio Conference, Russian Federation GPS, and Europe's GPS systems.
- P30 Promoting ham radio on a heritage destroyer. HMAS Vampire, VK2VMP, back story on re-establishing the radio room and operating on amateur bands to promote AR.
- P32 Promoting ham radio while promoting your club. Putting your club on the map, business cards, using the press, **BARG inc Media Exposure**, videos and picture posting, WICEN examples.
- P41 ACMA to do what? We're going back to the future! From February 2024 AMC (Hobart) will retire from providing amateur radio procedures and hands them back to the ACMA. Some history and statistics about the amateur service and assessments.
- P46 Homebrew three-band 100W HF transceiver. First article in a series on design and construction of a well set out and documented HF rig.
- P54 Consideration of RF power levels required to be handled by the tuner components. An Appendix to "VK3AQZ 400W t-Network tuner", using the tuner and some discussion on its performance.





- P56 Newcomers' Notebook. The Ins and Outs of op-amps. Basic description of how they work and typical circuit configurations that the amateur may require.
- P58 Highlights from the 2023 Annual General Meeting of the WIA. New office-bearers, award winners and picture of who's who at the AGM.
- P61 ALARA. Some sad news of SK. ALARA at the Hobart, 3 – 6 November 2023 meet, details of the 43<sup>rd</sup> ALARA Contest 2023, 26<sup>th</sup> August to 27<sup>th</sup> August 2023.
- P64 WIA DX Awards. New awards winners.



Are you interested in becoming an amateur radio operator?

If you are interested in WIA membership, the Amateur Radio Magazine and what is going on in the amateur radio world, then check out the site at;

<https://www.wia.org.au/>

A GREAT EFFORT AGAIN THIS MONTH  
FROM ALL MEMBERS IN PRESENTING  
ARTICLES FOR THE NEWSLETTER.  
IF YOU HAVEN'T, THEN HAVE A THINK AS  
TO WHAT YOU CAN DO TO KEEP YOUR  
PUBLICATION INTERESTING.

## QST August 2023 Review

Review by Craig VK3KG

- P9 Terrible Tower Lessons. To read as it concerns an amateur Ben DL6RAI who became a SK due to a tower accident. While many in Australia may not have a tower to climb it still bears stopping and making a plan for any activity that concerns some working at heights or just in a dangerous situation where some one's safety is involved. IT CAN HAPPEN TO YOU...



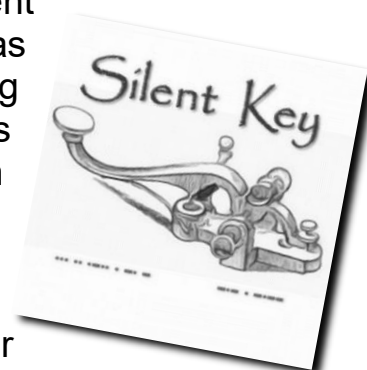
It reminds me of the maxim I learnt in the army some time ago and that was called the SIX P's.

The six P's are: Prior Planning Prevents Piss Poor Performance. So, when intending to climb a tower or go rock climbing just PREPARE yourself and gather all tools and other items needed [or maybe just thought may be needed] and have them ready. Of course, the main thing you need to do is have the correct climbing gear and include ropes and safety harnesses. You should always have a capable assistant with you who may have to climb with you or just be the Gaffer on the ground.

- P13 Member spot: Doreen KD2JTX. Is the new Secretary General of the ITU Originally wanting to be a doctor her pathway led her into electronics and through the Commerce dept of government at Washington then to the ITU on secondment. Serving in several positions until January appointed as the Gen Sec. With her understanding of amateur radio, she is well placed to represent the amateur in the ITU.



- P24 Letters. One member's report is particularly appropriate to all amateurs in effect their estate planning. When we pass on our equipment usually must be disposed of by a family member who has no idea of its value, what accessories go with it including operating and servicing manuals. I have seen this happen when assisting families with the "radio stuff" in the shed only to find that the smaller and unknown documents have been thrown out with all the "loose bits" on the table or bench top.



It's important to tell someone like an Executor about your gear and if you have any plans to donate to a local club or person.

It doesn't matter about your age either because once it's done and written down your wishes along with a will can be rested.

- P30. A High-Power Dummy Load for DC thru to VHF. This would make an excellent project for a club activity and give a finished product that uses any convenient salvaged heatsink along with flange mounted resistors and a thermal switch and a 12volt muffin fan. The specs for this load are given as DC to 250MHz at 1.1:1

but 300MHz at 1.25:1 and 1.6:1 at 350MHz. Even at 400MHz the SWR is 2.0:1. See [www.arrl.org/qst-in-depth](http://www.arrl.org/qst-in-depth) for further Smith chart data et al.

P36 Make a Dual 1/3 Wavelength Dipole. Covering 80 thru to 6 Metres it has a reasonable SWR and efficiency performance. Using open wire feeders and an unique square pole mast with a railway trolley to raise and lower the extra mast height.

P35 REVIEW: Yaesu has the FT710 AESS MF/HF and 6 Metre transceiver which is an SDR version. It runs 100Watts and has a 4-inch TFT screen along with customized menu settings.

[www.yaesu.com](http://www.yaesu.com) and costing USD1,150

P41 REVIEW: Icom IC T10 Dual band handheld transceiver. Covering 2/70 and the commercial FM 88-108- band. [www.icomamerica.com/en/downloads](http://www.icomamerica.com/en/downloads)

P45 REVIEW. MFJ 1898 Portable HF-6M Antenna. With a large loading coil at the bottom of a telescoped 20-inch antenna which opens out to 103 inches. The base coil mounts out a male 3/8" 26tpi adapter. Tuning is by sliding in or out a calibrated slider to the coil, then locking it off. Rated to 125W PEP it should be derated if using continuous carrier like FM Or FT8. [www.mfjenterprises.com](http://www.mfjenterprises.com)

P48 ASK DAVE. Antennas and Propagation.

P50 Tech Correspondence. Homebrew Quadrature Audio and AN UPDATE ON THE Minn Kota 110PD Charger.

P52 Equalisation and Ham Radio. Second of three-part article. Following on from Microphones in last months.

P59 Field Days and Country Expedition.

P59 Following Marconis footsteps The Navesink Twin Lights.

P65 Some photographs of New Products just on display at the recent ARRL hosted Hamvention at the Great Lakes in May.

P67 SK Chip Magelli K7JA SK 26 May 2023

Licensed for 60 years, chip was well known as an active amateur as well as working at Yaesu Musen for 29 years then at Heil Sound Communications followed by service with CQ Communications. This followed with Innovative Antennas and Ham Radio Outlet before retiring.

P80 Club Station. Steps for Organizing a Successful Hamfest. This should be a read for ALL members of a club. Especially ours right now. With the financial future of any group dependent on money the Hamvention is just one [but very important] to fundraise and to bring together members and non-members to meet and chat as well as to move along unused equipment, redistribute some money and to meet new members and chat. Whether already on a committee or looking to volunteer soon these writings may assist when asked to help organize one.





P82 Ham Radio Playlist.

P84 How's DX.? Sable Is, CY0S. 2023. Situated in the Atlantic Ocean there have been over 350 Shipwrecks there since `1583. Most recently the yacht MERRIMAC in July 1999. It took seven years to obtain a permit for this activity in May and seven ops on island with another eight on mainland. Where is this island, you ask? Well, its 300km SE from Halifax Nov SCOTIA, MEASURING 1.3 X 42 Km it's a national park declared a Canadian responsibility. Access is not usually granted to groups, they operated 160 -10M with 6, 2 EME and satellite. This is the 49<sup>th</sup> most sort after DXCC location. More at [www.t-rexsoftware.com/cy0s](http://www.t-rexsoftware.com/cy0s)



P56 World above 50 MHz. Fall & Solar cycle 25 brings F2 & Aurora DX to VHF Bands. ZL logged into WQ0P with five stations available. On 10May.

P92 Look back at QST Sept 1973. Build your own four element beam on 15 and 20Metres. All dimensions shown.

P98 Classic Radio. Restoring the GLOBE KING 500A

P100 100, 50 and 25 years Ago. Index.

P126 Index to Advertisers.



So that's yer bloomin lot. 73 Craig

## Silicon Chip August 2023 Review

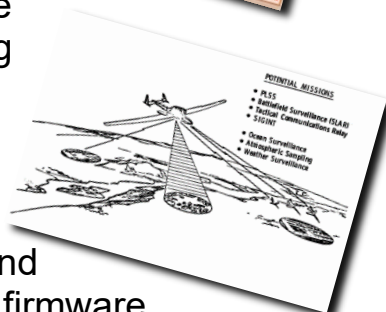
P2 Editorial Viewpoint. High inflation and price changes.

P5 Mailbag

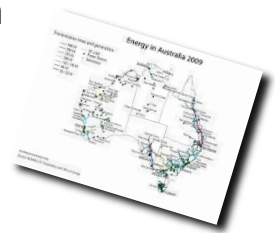
P14 High Altitude Aerial Platforms. (HAPS) All you need to know about the history and technicalities of maintaining a platform at high altitude for long periods of time and the advantages and uses over conventional fixed wing aircraft. Differing lighter than air balloons to solar powered aircraft, includes a great range of photographs of the types of craft that have been used and some yet to be mastered.

P30 The WebMite. A Raspberry Pi with MMBasic code and WiFi internet connectivity. Shows you how to load the firmware and what it can do.

P36 Watering System Controller. Using the WebMite in a garden environment controlling sprinklers and monitoring rainfall along with a yearly schedule, check weather forecasts and alert if a pipe has burst or sprinkler failed.



P46 The Electrical Grid. How the Australian Electricity Distribution Network and Market operate. A look at our distribution system, maps and tables of energy cost and usage, the interstate connectors and distribution in the remote parts of WA. How our power is balanced across the country with generators of all types playing a part.

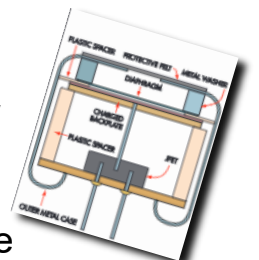


P54 LC and ESR Meter. AN Arduino based component analyser specifically for inductors and capacitors, along with the now all important ESR measurement. Using a UNO and a custom made shield the article describes the theory of LC and ESR measurement and how it is implemented in code and hardware. Uses a 20 x 4 LCD display on an I2C bus and an attachable table indicating typical ESR readings with various capacitance values and voltage ratings.



P66 RadioFest 2023. Historical Radio Society of Australia (HRSA) is staging Australia's largest vintage radio exhibition. 16<sup>th</sup> & 17<sup>th</sup> September at the Southern Community Centre, 27 Rupert Drive, Mulgrave, Victoria. More than 60 tables of radios and parts along with being able to chat with the members that restore the gear and run the society.

P68 Build A Low Cost, Calibrated Measurement Microphone. Using inexpensive condenser microphones (ECM) the details show you how to make a sound measuring device with measurable frequency response within  $\pm 2\text{dB}$  from 20Hz to 20KHz. PCBs and construction data show how to build and encapsulate the microphones.



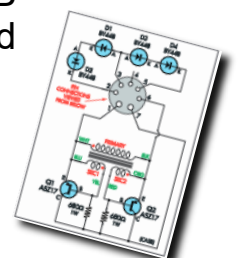
P80 Interview with DigiKey. A Q&A with our regions DigiKey Vice-President, Tony Ng. Soe questions on history and recent long lead times on component availably and some of the new products about to appear.



P82 Serviceman's Log. Still trying to have a service free holiday, looks at the service world in western central Europe. Some repair contributions including a Lenovo tablet and working with some Reveal 6D speakers.

P90 Circuit Notebook. dsPIC-based Audio Spectrum Analyser. USB "Power Board". 3D printed and laser cut cases for the Advanced Test Tweezers.

P94 Mechanical Vibrators, Part 3. Final construction of a BJT based vibrator unit for battery powered valve radios. Winding and coating the transformer and some scope traces of the resulting unit and its performance.

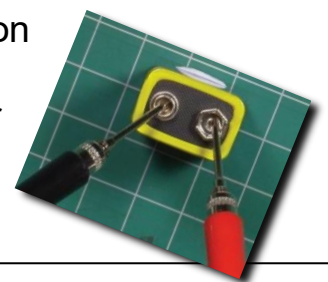


Did you know that a raven has 17 rigid feathers called pinions, while a crow has only 16.

The difference between a raven and a crow is just a matter of a pinion.

## DIYODE August 2023 Review

- P8 ROCK 4C+. An alternative to the Raspberry Pi. ROCK 4C+ has two USB-A 2.0 ports, two USB-A 3.0 ports, a Gigabit Ethernet port, a 3mm headphone jack, two micro HDMI and a USB-C port for power
- P17 DIY Arcade Basketball, Part 2. Putting the finishing touches to the framework, making and installing the electronics and other hardware.
- P44 Assign Away Compensatory Circuits for Incompetent MCUs. A microcontroller with restricted access to its interfaces or with limited resources pleads for support of external circuitry. Explains PWM, I2C SPI and other vital connections and hardware needed to keep your MCU happy.
- P51 DIY Claw Machine. Build your own Claw Machine from an old 3D Printer! Our awesome arcade machine comes complete with a joystick, smooth stepper motors, and even a clever claw system. The instructions to construct and operate your very own claw machine.
- P78 Musical Meccano. Check out this Meccano-based F1 car with its Arduino Nano and motor circuit that generates the Australian National Anthem. Code and Meccano building instructions.
- P84 DIY USB Breakout Board for Chromebooks Give your old Chromebook a new lease on life with this simple closed debugging cable breakout PCB. This handy board enables reflashing of firmware on Chromebooks using signed firmware/CR50 systems to allow alternative operating systems to be installed more easily.
- P91 Kids' Basics: Power Polarity Tester. A more thorough take on a simple polarity tester circuit for unknown power supplies and an introduction to constant current and power dissipation.



A commander walks into a bar and orders everyone around.

Never buy flowers from a monk. Only you can prevent florist friars.

I once worked at a cheap pizza shop to get by. I kneaded the dough.

Why is 'dark' spelled with a k and not c? Because you can't see in the dark.



## **Back Copies of BARG inc. Newsletters**

There are available on the BARG website scanned copies of old BARG Newsletters.  
<https://www.barg.org.au/>

Colin VK3NCC with the copies supplied by Craig VK3KG has been scanning them and adding to the collection on the website.

Great job....



## **NEWSLETTER ARTICLES - NEWS REQUIRED**

**As you can see from this month's newsletter, some great content from our members.**

**The newsletter needs members and non-members contributions keep it up.**

**Now that you have seen what others have contributed, have you any ideas, pictures, anecdotes, QSL Cards, see anything on the WWW that might interest the readership?**

**Thanks all, Tom. VK3DMK, Newsletter Editor.**  
**Contributions, ideas etc. can be emailed to**  
**[tomvk3dmk@gmail.com](mailto:tomvk3dmk@gmail.com)**

**OR**

**Bought along to the club coffee morning.**

**Each Thursday at 10:00m**

**"Food Seduction on Doveton"**

**524 Doveton St Nth, Ballarat.**

